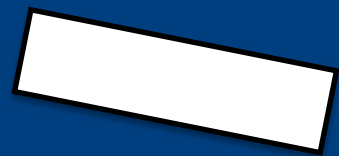
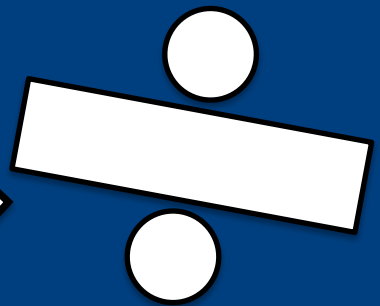
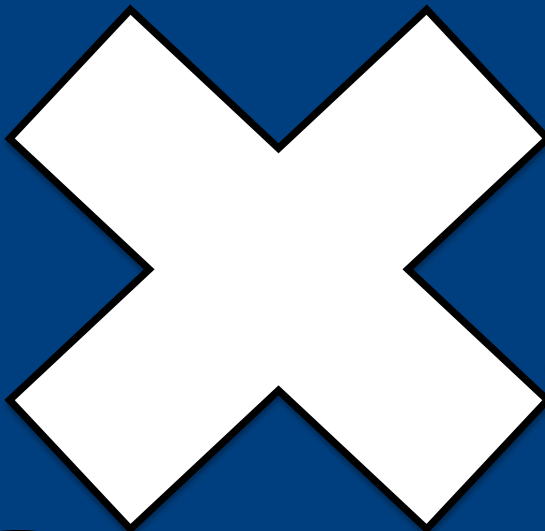


An Introduction to Multiplication

_____ 's
workbook



Name: _____ Date: _____

Introduction to Multiplication

Vocabulary:

- Multiplication- an operation that joins equal groups together.
- Factors- the numbers you are multiplying together.
- Product- the answer you get when you multiply two factors together.

Step 1: Multiplying with 0

*Remember- anytime one or both factors in the problem is a 0, the product or answer is always 0. This is called the **"Zero Property of Multiplication."**

Example: $0 \times 0 = 0$

You are multiplying a group of 0 objects 0 times.

$$0 \times 3 = 0$$

$$3 \times 0 = 0$$

You are multiplying a group of 0 objects 3 times.

Hint

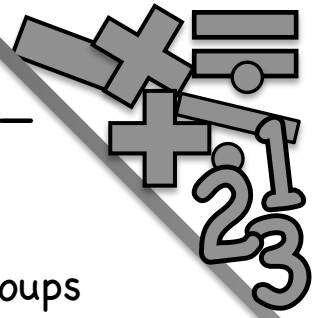
Multiplication is the same thing as adding over and over again. So $3 \times 0 = 0$ is the same as:

$$0 + 0 + 0 = 0$$

This shows how multiplying by 3 is the same as adding a number 3 times.

Complete the following problems:

$$6 \times 0 = \underline{\quad} \quad \text{or} \quad 0 + 0 + 0 + 0 + 0 + 0 = \underline{\quad}$$



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Introduction to Multiplication

More practice with 0's

Complete the following multiplication problems with 0.

1) $5 \times 0 = \underline{\quad}$

4) $0 \times 152 = \underline{\quad}$

2) $0 \times 8 = \underline{\quad}$

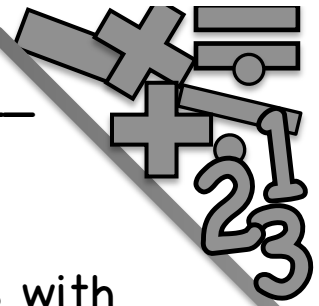
5) $99 \times 0 = \underline{\quad}$

3) $78 \times 0 = \underline{\quad}$

6) $0 \times 0 = \underline{\quad}$

Complete the un-shaded part of the multiplication table below.

	0	1	2	3	4	5	6	7	8	9	10
0	0	0									
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											



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Introduction to Multiplication

Step 2: Multiplying with 1's

*Remember - anytime 1 is a factor, the product or answer is always the same number as the other factor. This is called the **"Identity Property of Multiplication."**

Example:

$$1 \times 7 = 7$$

You have seven groups of 1. For instance, if you have 7 plates and each plate has 1 cookie on it, you have a total of 7 cookies.



This is also the same as:

$$1 + 1 + 1 + 1 + 1 + 1 + 1 = 7$$

Multiplying 1×7 is also the same as adding 1, 7 times.

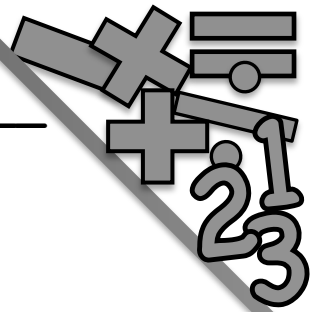
Practice:

Complete the following problems.

$$6 \times 1 = \underline{\quad} \quad \text{or} \quad 1 + 1 + 1 + 1 + 1 + 1 = \underline{\quad}$$

$$\underline{\quad} \times 1 = 3 \quad \text{or} \quad 1 + 1 + 1 = \underline{\quad}$$

$$1 \times 4 = \underline{\quad} \quad \text{or} \quad \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} = 4$$



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Introduction to Multiplication

Practice:

Complete the following problems

1. $5 \times 1 = \underline{\quad}$

4. $0 \times 1 = \underline{\quad}$

2. $1 \times 1 = \underline{\quad}$

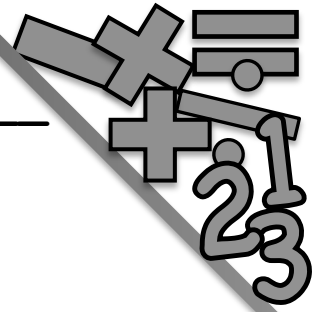
5. $1 \times 329 = \underline{\quad}$

3. $22 \times 1 = \underline{\quad}$

6. $3 \times 1 = \underline{\quad}$

Complete the un-shaded part of the multiplication table:

	0	1	2	3	4	5	6	7	8	9	10
0	0	0									
1		1	2								
2											
3											
4											
5											
6											
7											
8											
9											
10											



Name: _____

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Introduction to Multiplication

Steps 1-2 Quiz

1. $1 \times 8 = \underline{\quad}$

6. $65 \times 0 = \underline{\quad}$

2. $3 \times 0 = \underline{\quad}$

7. $1 \times 0 = \underline{\quad}$

3. $0 \times 0 = \underline{\quad}$

8. $1 \times 9 = \underline{\quad}$

4. $100 \times 1 = \underline{\quad}$

9. $15 \times 1 = \underline{\quad}$

5. $15 \times 1 = \underline{\quad}$


10. $0 \times 5 = \underline{\quad}$

Draw lines to match the following terms.

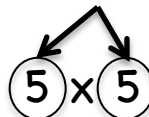
1. Product

a. $1 \times 5 = 5$

2. Factors

b. $3 \times 2 = 6$ 

3. Zero property of multiplication

c. $5 \times 5 = 25$ 

4. Identity property of multiplication

d. $3 \times 0 = 0$

Score: ____/14 ____%

